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Technical Memorandum

Date: 20 August 2020

To: Sherwood McKenney, District Engineer

Waste Management Disposal Services of Maine, Inc. (WMDSM)

From: Nicholas J. Yafrate, P.E.

Scott M. Luettich, P.E.

Geosyntec Consultants (Geosyntec)

Subject: Response to MEDEP Comments

Phase 14 Solid Waste Permit Application - Volumes V and VI

Crossroads Landfill, Norridgewock, Maine

The purpose of this memorandum is to provide responses to comments (RTCs) from the Maine Department of Environmental Protection (MEDEP) after their review of Volume V, Operations Manual and Volume VI, Draft Construction Bid Documents of the Phase 14 Solid Waste Permit Application, dated October 2019. MEDEP's review comments were presented in a memorandum transmitted as an attachment to an email from Kathleen Tarbuck to WMDSM on 10 August 2020. Clarifications to some of the review comments were provided during a telephone call between Mr. Yafrate and Ms. Tarbuck on 17 August 2020.

MEDEP's comments are presented below in *italics* followed by responses to each.

1. Application, Volume V

The comments refer to the sections noted in the Site Operations Manual, submitted in Appendix A of Application, Volume V for the secure landfill.

A. Section I, Part A, General. Section 11.1 Litter Control. Page 6. The Site Operations Manual states that "WMDSM will periodically police roadsides around the Crossroads Facility to maintain cleanliness of the site." Additional information and clarification should be provided in this section addressing the litter control, such as litter control fences utilized at the site and any routine litter maintenance scheduled and performed

by facility personnel or contracted entities. Alternatively, Section II of the Site Operations Manual can be referenced; i.e. Section II, Part A page 14 includes detail on litter control for the secure landfill.

Response to Comment 1A. WMDSM will modify Section I, Part A to read as follows:

"WMDSM will manage litter at the Crossroads Facility through an established litter maintenance program. Facility personnel and/or contracted third party entities will pick up litter at the perimeter of the active landfill(s), at areas on-site beyond the active landfill perimeter (as necessary), along the site access road, and adjacent to US Route 2 within a few miles of the facility entrance. Additionally, the landfill operators will attempt to promptly cover potential litter at the landfill active face to minimize windblown transport. Lastly, litter control fences will be erected at the perimeter of the landfill prior to waste disposal to minimize the release of windblown litter. Further discussion regarding litter control fences is provided in Section II, Part A."

B. Section II, Part A, Secure Landfill.

1) Section 2.5 Cover Material Requirements. Page 5. The Site Operations Manual notes utilizing cover to minimize odor, but it does not include an odor management plan. The Department's regulation Landfill Siting, Design, and Operation 06-096 C.M.R. ch. 401, \$4(C)(8)(a)(iv) states "[u]nless the material proposed as an alternative daily cover has no odor or potential to create a nuisance odor, the submittal must include an odor management plan that includes provisions for the prevention and control of nuisance odor during routine operations, and a process for responding to any odor complaints received." The Site Operations Manual should address this requirement: characterizing the odor potential of the alternative daily cover and/or the inclusion of an odor management plan

Response to Comment 1B.1) WMDSM's list of approved Alternative Daily Cover (ADC) materials is presented in Section 2.5.2, as follows: reinforced synthetic tarps, unsalable woodwaste fines (tailings) from the Woodwaste Facility, ground utility poles, ground Construction/Demolition Debris (CDD), Pioneer Plastics by-product, approved fly-as and bottom-ash, approved auto shredder residues, mill felt, and urban fill soils.

These materials do not have significant potential to create airborne odors. However, the following sentence will be inserted into Section II-Part A (§2.5.2) of the Site Operations Manual:

"For new ADC materials not already on the list above and that have potential to create airborne odors, a characterization of the odor potential will be conducted by WMDSM prior to using the materials as ADC. Additionally, the Department will be notified of new ADC materials in order to observe and approve prior to continued use."

2) Section 4.1 Purpose. Page 14. This section appears to be missing the narrative. The sentence for this section may have been erroneously been inserted in the header of section 4.2.

Response to Comment 1B.2) The statement of purpose was inadvertently inserted into the header for §4.2. As such, §4.1 will be corrected to include the following sentence:

"WMDSM records the approximate location of each Special Waste load within the landfill so that the Special Waste may be found as/if necessary."

- C. Section III. Leachate Management Plan.
 - 1) Section 6.3 Disposal. Page 16. This section should be updated to include the most current leachate treatment agreements.

Response to Comment 1C.1)

Section 6.3 of the Leachate Management Plan, Disposal (page 16) will be updated to include the most current leachate treatment agreements at the time the Site Operations Manual is submitted to MEDEP. It is noted that the AMSD Industrial Wastewater Discharge Permit was executed on December 18, 2019 and is attached hereto. Once an updated agreement with SAPPI is finalized it will be provided to MEDEP as well. (See also WMDSM's Response to Comment 13 in the 31 March 2020 memorandum titled Response to MEDEP Comments Phase 14 Solid Waste Permit Application – Volume 1).

2) Section 7.3 Action Leakage Rates and Response Action Plan. Page 17. This section references the leachate flow measurements included in Appendix III- E; however, it appears that the reference should be Appendix III-C.

Response to Comment 1C.2) The reference in Section 7.3 to detailed description of leachate flow measurements in Appendix III-E was a typographical error. The reference will be corrected to read Appendix III-C.

D. Section VI. Stability Monitoring Plan. Section 2.1 Key Personnel. Page 2. The phone numbers in the table for the Department contacts should be updated to the following: Linda Butler (207) 592-5329 and Kathy Tarbuck (207) 458-9074.

Response to Comment 1D The names and phone numbers of the MEDEP personnel in the Stability Monitoring Plan, Section 2.1 Key Personnel, will be updated to Ms. Butler and Ms. Tarbuck with the appropriate phone numbers.

E. General Comments:

1) Phase 14 Updates. As stated in the Application, Vol. V, the following sections of the Sites Operations Manual shall be updated prior to Phase 14 construction and operations per the requirements of the Department's regulation Landfill Siting, Design, and Operation 06-096 C.M.R. ch. 401,

Response to Comment 1E.1) The updated sections of the Site Operations Manual will be submitted to MEDEP no less than 60 days before operations commence in the first cell of Phase 14.

2) Additional Updates. In conjunction with the Phase 14 updates, additional updates should be made to the Site Operating Manual including, but not limited to: items associated with construction and operation of Phase 8C" (leachate management, SWPPP, landfill gas, stability monitoring, etc.) and closure of Phase 11 (various section narratives and post closure monitoring and maintenance).

Response to Comment 1E.2) WMDSM agrees that, in addition to the updates for the Phase 14 landfill, the Site Operations Manual will also be updated to include the recently constructed Phase 8C" PM landfill cell and final closure of Phase 11. It is noted that substantive information pertaining to the Phase 8C" PM Secure Landfill and Phase 11 Final Closure has been submitted to MEDEP within the Crossroads Landfill Annual Reports and other documentation/reports. Nonetheless, as MEDEP requested, the updated sections of the Site Operations Manual will be submitted no less than 60 days before operations begin in the first cell of Phase 14.

3) Additional Department Comment. The Department may have further review comments when the updated Sites Operations Manual is submitted.

Response to Comment 1E.3) Understood. No further response required.

2. Application, Volume VI

- A. Appendix VI(a) Quality Assurance Manual (QAM) Cell Construction.
 - 1) Section 1.5 Site and Project Meetings. Pages 6 and 7. The Department should be notified of the time and location of pre-construction and weekly meetings.

Response to Comment 2A.1) Agreed. The following sentence will be added to the end of the first paragraph of the Cell Construction QAM, Section 1.5.1 Preconstruction Meeting:

"MEDEP will be pre-notified of the time and location of the preconstruction meeting."

The following sentence will be inserted into the first paragraph of Section 1.5.2 Progress Meetings:

"MEDEP will be pre-notified of the time and location of the progress meetings."

2) Section 7 Wick Drains/Underdrains. Page 18. Although this section includes wick drain requirements, it is understood that there are no wick drains proposed for Phase 14.

Response to Comment 2A.2) Agreed. No further response required.

B. Appendix VI(b) Quality Assurance Manual (QAM) – Final Closure Construction, Section 1.5 Site and Project Meetings. Pages 4 and 5. The Department should be notified of the time and location of pre-construction and weekly meetings.

Response to Comment 2B Agreed. The following sentence will be added to the end of the first paragraph of the Final Closure Construction QAM, Section 1.5.1 Preconstruction Meeting:

"MEDEP will be pre-notified of the time and location of the preconstruction meeting."

- C. Appendix VI(c) Technical Specifications Cell Construction
 - 1) Section 02170. Wick Drain and Underdrain. This specification includes wick drain construction, along with reference to the Asbestos Landfill (i.e, page 02170-2 "subgrade preparation and common Borrow placement over exterior portion of the Asbestos Landfill may be feasible for stormwater/erosion and sedimentation control purposes"). It is understood that there are no wick drains proposed and the Asbestos Landfill is not part of this project.

Response to Comment 2C.1) Agreed. Wick drains are not proposed for the Phase 14 project. The reference to the Asbestos Landfill on page 02170-2 was a holdover from the recent construction of Phase 8C" PM which included wick drains and a piggyback tie-in with the Asbestos Landfill; this reference will be removed from the specifications that are issued for Phase 14 cell construction. It is noted that even though wick drains are not part

of the Phase 14 cell construction, Specification 02170, *Wick Drains and Underdrain*, will remain in the Phase 14 Specifications to avoid ripple effect changes in other related documents such as the QAM. The wick drain specification, however, will be marked as an "Inactive Section" for Phase 14.

2) Section 02240. Soil Barrier Layer. Section 3.01(F), page 02240-4. References is made to potential utilization of the existing silt clay layer on the Asbestos Landfill. The Asbestos Landfill is not part of this project and references to it should be removed.

Response to Comment 2C.2) Agreed. These references specific to potential utilization of the existing silt clay on the Asbestos landfill were holdovers from the recent construction of Phase 8C" PM which included a piggyback tie-in with the Asbestos Landfill, and will be removed from the Specifications that are issued for Phase 14 cell construction.

3) Section 02530. Geosynthetic Clay Liner. Section 1.04 Moisture Content testing is listed as ASTM D2216 and Grab Strength is listed as ASTM D4632. According to GRI GCL3, the updated methods are ASTM D5993 for Moisture Content and ASTM D6768 for Tensile Strength. The correct methods should be verified and utilized, as appropriate.

Response to Comment 2C.3) Agreed. The most up-to-date test standards will be referenced in Specification Section 02530 that is issued for Phase 14 construction.

D. General Comment. Phase 14 Updates. As stated in the Application, Vol. VI, the Quality Assurance Manuals and Technical Specifications for Phase 14 will be submitted for Department approval prior to the construction of each cell. The Department may have further review comments when the construction documents are submitted.

Response to Comment 2D) Understood. No further response required.

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ATTACHMENT:

Anson-Madison Sanitary District Industrial Wastewater Discharge Permit, dated 18 Dec 2019